Remarks

In view of the following remarks, favorable reconsideration of the outstanding Office Action is respectfully requested.

Claims 1-16 remain in this application.

1. § 103 Rejections

The Examiner has rejected claims 1-9, 11, 13-16 under 35 U.S.C. § 103(a) as being unpatentable for obviousness over U.S. Patent No. 4,793,840 (Harding) in view of U.S. Patent No. 5,073,179 (Yoshimura, et al.) or U.S. Patent No. 4,867,775 (Cain et al.).

The Office Action asserts that Harding teaches, inter alia, a method of forming an optical fiber by feeding a preform at a predetermined first rate and drawing an optical fiber at a predetermined second rate. The Office Action further asserts that Harding teaches a constant downfeed rate during drawing of the fiber. Applicants respectfully disagree and traverse the rejection.

Harding discloses in the Abstract that "*The drive rate is modified in response to deviations from the nominal fibre diameter...and the preform feed rate is modified to maintain an average pulling rate...*" In column 1, lines 41 – 48, Harding teaches "*...modifying the speed of the capstan in response to the deviation signal from the diameter monitor...and controlling the glass melting rate by varying the preform feed drive rate to maintain an average fibre pulling rate close to the second predetermined rate.*" Also in column 1 lines 61 – 64, "*...and means for automatically varying the first rate* [prefrom drive rate] *to maintain an average fibre pulling rate close to the second predetermined rate and thereby control the glass melting rate.*" From column 3 lines 13 – 17, "*Thus the control algorithm 21 functions to maintain long term control of the preform feed drive and will thus, in the situation described, attempt to increase slowly the preform feed rate to match the measured capstan speed.* From column 4, lines 10 – 15 (claim 1), "*...and wherein a signal is derived representative of the rotation speed of the capstan, and this signal is compared with a signal representative of the predetermined second rate to derive a preform feed control signal for adjusting said first rate* [preform feed rate]." Further in column 4, lines 32 – 36, "*...and a control algorithm for comparing the measured speed with the preset speed and arranged to provide a control signal for adjusting the first rate at which the preform is fed into the furnace.*" Applicants contend that Harding does not fairly teach maintaining a

constant preform downfeed rate. The Office Action, on page 3, further states that Harding teaches a preform downfeed rate that "*can*" be varied, implying that such variation is optional. Applicants respectfully disagree, and assert that the downfeed of Harding rate "is" varied as a function of normal operation and as supported by Harding's disclosure. Applicants therefore believe that claim 1 is patentable over Harding, and that claims 2-9, which depend from claim 1, are therefore also allowable. Neither Yoshimura et al. or Cain et al. cure the deficiencies of Harding.

With respect to claim 11 of the present invention, the Office Action argues that "*...the various speeds as set forth by Harding qualify as draw speed zones.*" It is unclear to Applicants as to which "various speeds" the Office Action is referring to. Moreover, the Office Action contends that "*Because Harding preselects a desired diameter value and it would be clearly obvious to select multiple diameter values dependent on the desired end use of the fiber it appears to the examiner that various draw speed ranges and associated downfeed rates would be inherent in the process of Harding.*" However, the Office Action provides no basis for such an extrapolation. Applicants define zone as a "range of draw speeds" (see page 4, line 26, for example). Claim 11 requires, inter alia, that the draw rate is sensed, and a determination made as to whether or not the sensed draw rate is within a zone of predetermined speed (i.e. a predetermined zone). Clearly, Harding does not teach a predetermined zone of draw speeds, nor does Harding teach varying the downfeed rate if the sensed draw rate is outside of the predetermined zone. Where the Examiner's position is based entirely on his own supposition as to what is inherent in the prior art process, the claims are allowable (see 60 USPQ 342, ex parte Pierce, Jr.). Based on the above, Applicants believe that claim 11 is patentable over Harding, and that claims 13-15, which depend from claim 11, are therefore also patentable. As previously stated, neither Yoshimura et al. or Cain et al. cure the deficiencies of Harding.

For at least the reasons provided above, Applicants also believe claim 16 is patentable over Harding.

The Office Action rejected claims 10 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Harding in view of Yoshimura. Neither Yoshimura et al. nor Hart Jr. et al. (5,298,047) cure the deficiencies of Harding.

2. Conclusion

Based upon the above amendments, remarks and papers of record, Applicants believe the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicants respectfully request reconsideration of the pending claims 1-16 and a prompt Notice of Allowance thereon.

Applicants believe that no extension of time is necessary to make this Response timely. Should Applicants be in error, Applicants respectfully request that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorize the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Kevin M. Able at 607-974-2637.

Respectfully submitted,

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